

IN THE CLAIMS

1 1. (Currently Amended) [~~Nucleotide~~] An isolated nucleotide sequence encoding for a
2 protein characterized in having a silencing activity and in comprising a RNA-dependent RNA
3 polymerase domain, wherein the domain is at least 30% homologous with the amino acid
4 sequence from aa. 710 to aa. 1282 of [~~SEQ ID No. 1~~] SEQ ID No. 2.

1 2. (Currently Amended) [~~Nucleotide~~] An isolated nucleotide sequence encoding for a
2 protein characterized in having a silencing activity and in comprising a RNA-dependent RNA
3 polymerase domain according to claim 1, wherein the domain is at least 40% homologous with
4 the amino acid sequence from aa. 710 to aa. 1282 of [~~SEQ ID No. 1~~] SEQ ID No. 2.

1 3. (Currently Amended) [~~Nucleotide~~] An isolated nucleotide sequence encoding for a
2 protein characterized in having a silencing activity and in comprising a RNA-dependent RNA
3 polymerase domain according to claim 2, wherein the domain is at least 50% homologous with
4 the amino acid sequence from aa. 710 to aa. 1282 of [~~SEQ ID No. 1~~] SEQ ID No. 2.

1 4. (Currently Amended) [~~Nucleotide~~] An isolated nucleotide sequence encoding for a
2 protein characterized in having a silencing activity and in comprising a RNA-dependent RNA
3 polymerase domain according to claim 3, wherein the domain is the amino acid sequence from
4 aa. 710 to aa. 1282 of [~~SEQ ID No. 1~~] SEQ ID No. 2.

1 5. (Currently Amended) [~~Nucleotide~~] An isolated nucleotide sequence encoding for a
2 protein characterized in having a silencing activity and in comprising a RNA-dependent RNA

3 polymerase domain according to claim 4, wherein said nucleotide sequence encodes for a
4 protein having the amino acid sequence of [~~SEQ ID No. 1~~] SEQ ID No. 2 or functional
5 portions thereof.

1 6. (Currently Amended) [~~Nucleotide~~] An isolated nucleotide sequence encoding for a
2 protein characterized in having a silencing activity and in comprising a RNA-dependent RNA
3 polymerase domain according to claim 4, wherein said nucleotide sequence is the sequence of
4 [~~SEQ ID No. 1~~] SEQ ID No. 2 or its complementary sequence.

1 7. (Currently Amended) Expression vector comprising, under the control of a
2 promoter that [~~is-expressed~~] directs the expression in bacteria, the nucleotide sequence
3 according to claim 1.

1 8. (Currently Amended) Expression vector comprising, under the control of a
2 promoter that [~~is-expressed~~] directs the expression in plant organs, the nucleotide sequence
3 according to claim 1 in a sense [~~and~~] or anti-sense orientation.

1 9. (Currently Amended) Expression vector comprising, under the control of a
2 promoter that [~~is-expressed~~] directs the expression in fungi, the nucleotide sequence according
3 to claim 1 in a sense [~~and~~] or anti-sense orientation.

1 10. (Currently Amended) Expression vector comprising, under the control of a
2 promoter that [~~is-expressed~~] directs the expression in animals, the nucleotide sequence
3 according to claim 1 in a sense [~~and~~] or anti-sense orientation.

1 11. (Currently Amended) [~~Prokaryotic~~] Bacterial organism transformed [~~by using~~] the
2 expression vector active in bacteria according to claim 7.

1 12. (Original) Plants or a specific plant organ transformed by using the expression
2 vector active in plants according to claim 8.

1 13. (Previously Presented) Plant mutated at the nucleotide sequence according to
2 claim 1 having a reduced or inhibited silencing activity.

1 14. (Currently Amended) Fungus transformed [~~by using~~] the expression vector active
2 in fungi according to claim 9.

1 15. (Previously Presented) Fungus mutated at the nucleotide sequence according to
2 claim 1 having a reduced or inhibited silencing activity.

1 17. (Previously Presented) Non-human animal mutated at the nucleotide sequence
2 according to claim 1 having a reduced or inhibited silencing activity.

1 18. (Original) Protein characterized in having a silencing activity and in comprising a
2 RNA-dependent RNA polymerase domain wherein the domain is at least 30% homologous
3 with the amino acid sequence from aa. 710 to aa. 1282 of SEQ ID No. 1.

1 19. (Original) Protein characterized in having a silencing activity and in comprising a
2 RNA-dependent RNA polymerase domain according to claim 18, wherein the domain is at
3 least 40% homologous with the amino acid sequence from aa. 710 to aa. 1282 of SEQ ID No.
4 1.

1 20. (Original) Protein characterized in having a silencing activity and in comprising a
2 RNA-dependent RNA polymerase domain according to claim 19, wherein the domain is at
3 least 50% homologous with the amino acid sequence from aa. 710 to aa. 1282 of SEQ ID No.
4 1.

1 21. (Original) Protein characterized in having a silencing activity and in comprising a
2 RNA-dependent RNA polymerase domain according to claim 20, wherein the domain is the
3 amino acid sequence from aa. 710 to aa. 1282 of SEQ ID No. 1.

1 22. (Original) Protein characterized in having a silencing activity and in comprising a
2 RNA-dependent RNA polymerase domain according to claim 21, comprising the amino acid
3 sequence of SEQ ID No. 1 or functional portions thereof.

1 23. (Currently Amended) Use of the nucleotide sequence according to claim 1 to
2 modulate the gene silencing in plants, animals and fungi, comprising the step to introduce said
3 nucleotide sequence in one of said organism to repress gene functions.